

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A method of processing runtime functions, comprising:
 - receiving a call to a runtime function;
 - determining associated data from the call to the runtime function;
 - determining a target address from the associated data;
 - comparing the target address with a reference list of valid target addresses; and
 - if the target address is found on the reference list of valid target addresses then
 - executing the target.
2. (Original) The method of claim 1, wherein the step of determining the associated data comprises accessing data in a data structure connected with the runtime function and calculating the associated data based on the accessed data.
3. – 4. (Canceled)
5. (Currently Amended) The method of claim 1 4, wherein maintaining the list comprises comprising the step of generating the reference list of valid targets target addresses at compiler and link time.
6. (Currently Amended) The method of claim 1 4, wherein maintaining the list comprises comprising the step of generating the reference list of valid targets target addresses at runtime.
7. – 9. (Canceled).
10. (Currently Amended) A tangible computer-readable medium having stored thereon computer-executable instructions for performing a method of processing runtime functions, the method comprising:
 - receiving a call to a runtime function;

determining associated data from the call to the runtime function;
determining a target address from the associated data;
comparing the target address with a reference list of valid target addresses; and
if the target address is found on the reference list of valid target addresses then
executing the target.

11. (Currently Amended) The ~~computer readable~~ computer-readable medium of claim 10, wherein the step of determining the associated data comprises accessing data in a data structure connected with the runtime function and calculating the associated data based on the accessed data.

12. – 13 (Canceled)

14. (Currently Amended) The computer-readable medium of claim 10 13, wherein ~~maintaining the list comprises comprising the step of generating the list of valid targets target~~ addresses at compiler and link time.

15. (Currently Amended) The computer-readable medium of claim 10 13, wherein ~~maintaining the list comprises comprising the step of generating the list of targets target~~ addresses at runtime.

16. – 18. (Canceled)

19. (Currently Amended) A system for processing runtime functions, comprising:
 - a processor that receives a call to a runtime function; and
 - a dispatcher system that determines associated data from the call to the runtime function, determines a target address from the associated data, and if the target address is found on the reference list of valid target addresses then executes the target.
20. (Original) The system of claim 19, wherein the dispatcher system comprises a module to access data in a data structure connected with the runtime function and calculate the associated data based on the accessed data.
21. – 22. (Canceled)
23. (Currently Amended) The system of claim 19 22, further comprising a compiler that generates the reference list of valid targets target addresses.
24. – 26 (Canceled)
27. (Original) The system of claim 19, further comprising a compiler and a linker that compiles code to produce an executable that is marked with an identifier indicating that the executable supports runtime protection.
28. (New) The method of claim 1 comprising the step of storing the target address in a caller provided location.
29. (New) The method of claim 1 comprising the step of terminating execution if the target address is not found on the reference list of valid target addresses.
30. (New) The method of claim 1 comprising the step of storing the reference list of valid target addresses in memory.

DOCKET NO.: MSFT-2568/307781.01
Application No.: 10/750,297
Office Action Dated: September 28, 2007

PATENT
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PROCEDURE PURSUANT TO
37 CFR § 1.116

31. (New) The computer-readable medium of claim 10 comprising the step of storing the target address in a caller provided location.
32. (New) The computer-readable medium of claim 10 comprising the step of terminating execution if the target address is not found on the reference list of valid target addresses.
33. (New) The computer-readable medium of claim 10 comprising the step of storing the reference list of valid target addresses in memory.
34. (New) The system of claim 19 comprises a module to store the target address in a caller provided location.
35. (New) The system of claim 19 wherein execution is terminated if the target address is not found on the reference list of valid target addresses.
36. (New) The system of claim 19 comprises a module to store the reference list of valid target addresses in memory.